



# Let nature deliver drinking water in your purifier

Increasing the likeability of  
tap water with Aquaporin Inside®

# AQUAPORIN INSIDE® TAP WATER MEMBRANE

The only membrane in the industry to use aquaporins - nature's own water filters - to purify drinking water.

Great tasting drinking water that's healthy, refreshing, and purified just as nature intended.



## AN INNOVATION, READILY AVAILABLE

The Aquaporin Inside® membrane elements can be operated in the same operating conditions as conventional polyamide thin film composite membrane elements.

Available in conventional residential and commercial membrane element sizes.

Tested and certified by NSF International for safe use in drinking water applications.

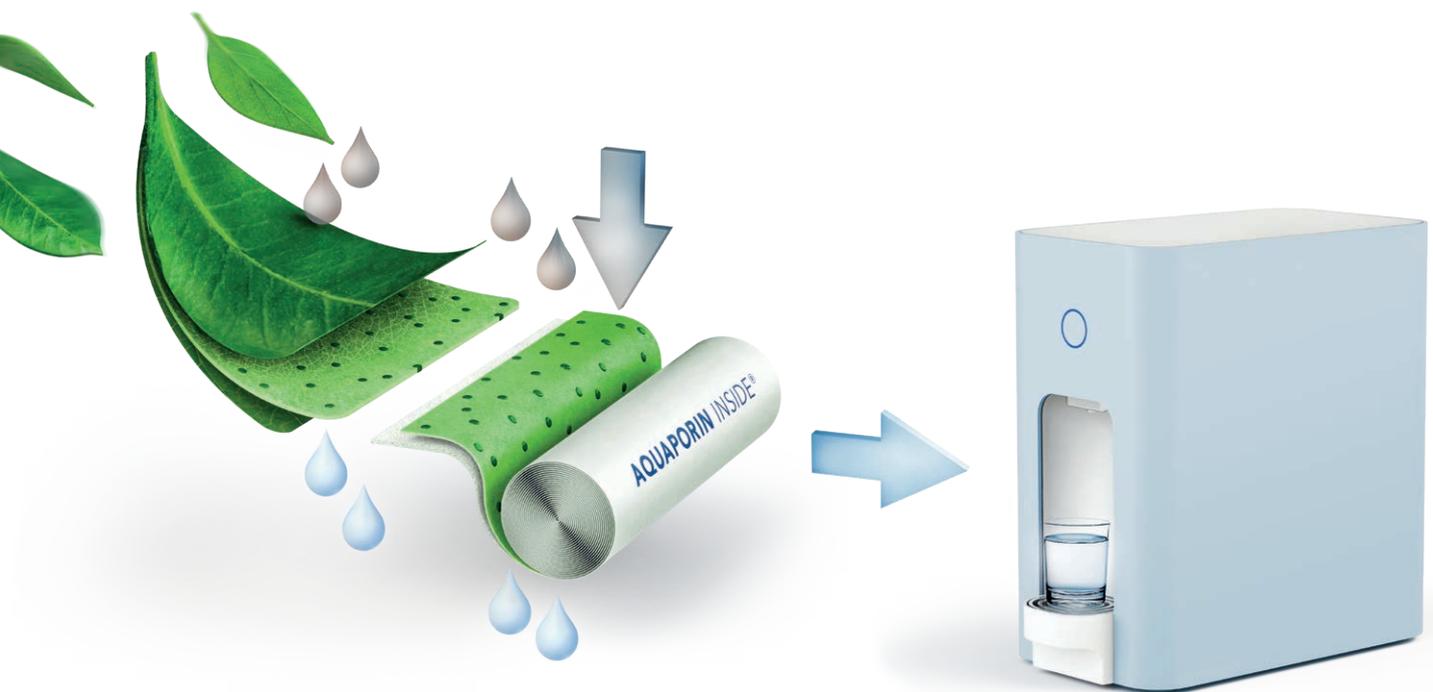
## MEMBRANE ELEMENT SIZES TO MATCH YOUR PREFERRED PERMEATE FLOW RATE

Product name	Permeate flow rate		Pressure (psi)
	GPD	L/h	
TWRO1812-175	175	28	60
TWRO3012-600	600	95	80

Other size and configuration elements are available upon request.

# WATER MADE BY NATURE

It's a revolutionary idea, based on 3.8 billion years of natural innovation. We believe it will change the world.



Over millions of years, nature has developed unique water channels, also known as aquaporins. Aquaporin water channels are found in all living organisms from mangrove trees to human kidneys, where they are responsible for rapid water transportation across cell membranes. They are very effective in the transport of water, and 1 gram of aquaporin protein can transport up to 700 liters of water per second (1 billion molecules per second).

The core of our Aquaporin Inside® technology is to replicate nature's way of filtering water by creating a stable and active layer for the aquaporin protein. When incorporating the protein into an industrial membrane, the result is a natural water purification technology - The Aquaporin Inside® Tap Water membrane.

# AQUAPORIN WANTS TO INCREASE THE LIKEABILITY OF YOUR HOME DRINKING WATER

The Aquaporin Inside® Tap Water membrane increases the likeability and acceptability of home drinking water by purifying tap water to the right level of dissolved solids.

It is the presence of dissolved solids which contributes to the taste of drinking water.

According to how the World Health Organization categorize taste, the Aquaporin Inside® Tap Water membrane will offer excellent tasting home drinking water.

## ORGANOLEPTIC PROPERTIES OF DRINKING WATER

According to the World Health Organization, taste and perception influence your acceptance of your home drinking water.

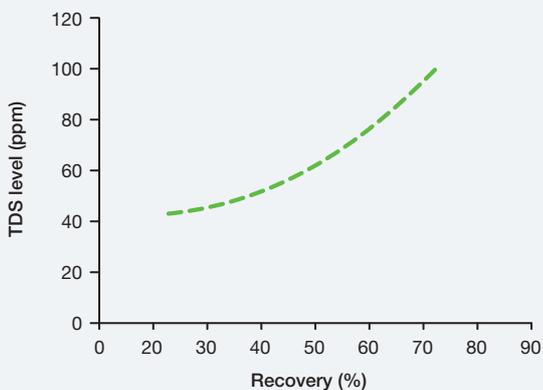
Unacceptable	Extremely low level of TDS
<b>Excellent</b>	<b>100-300 mg/L TDS</b>
Good	300-600 mg/L TDS
Fair	600-900 mg/L TDS
Poor	900-1200 mg/L TDS
Unacceptable	> 1200 mg/L TDS

Source: WHO: "Total dissolved solids in Drinking-water"



# HOW OPERATING CONDITIONS AFFECT THE USER EXPERIENCE

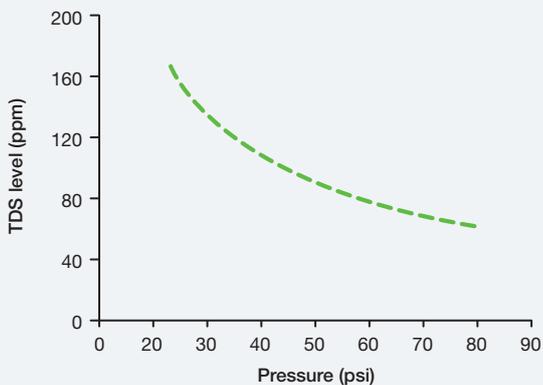
Water quality and perception depend on different factors that are affected by how you treat your water. Below you can see how different operating conditions affect the quality of water when treated with Aquaporin Inside<sup>®</sup> tap water membrane.



## WATER RECOVERY

Aquaporin suggests water purification with a high recovery of feed water to preserve taste and ensure the most sustainable water purification.

The graph to the left shows the TDS level of water naturally purified with the Aquaporin Inside<sup>®</sup> Tap Water membrane at various recovery levels operating at 60 psi.

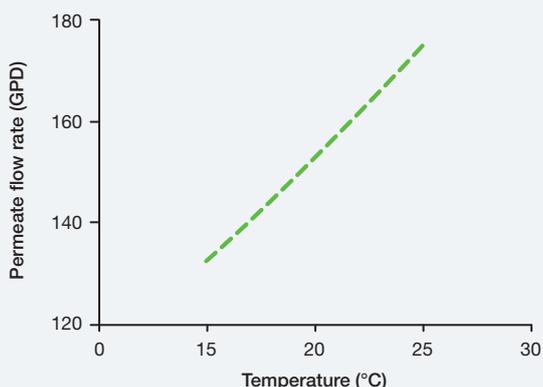


## PRESSURE

Aquaporin suggests water purifiers to operate at 50-80 psi for a good flow of water.

If the pressure from the public tap water supply is low or inconsistent, it is recommended to use a booster to ensure a constant pressure level and reliable performance.

The graph to the left shows the TDS level of water naturally purified with the Aquaporin Inside<sup>®</sup> Tap Water membrane at various pressure levels operating at 50% water recovery.



## TEMPERATURE

The temperature of the tap water must be considered when designing a purifier for a targeted performance.

The graph to the left shows the permeate flow rate of water naturally purified with the Aquaporin Inside<sup>®</sup> Tap Water membrane at various temperatures operating at 60 psi and 50% recovery.

# ABOUT AQUAPORIN

Aquaporin is a global water technology company headquartered in Denmark. We are dedicated to revolutionizing water purification, by merging biotechnological techniques and state-of-the-art engineering. We are the only company that incorporates aquaporins into water purification membranes

We are working with customers to develop more sustainable methods of dealing with wastewater streams – giving them a tangible way to improve their sustainability performance and connect with today's sustainability focused consumers, while also driving costs down.

For more information go to [aquaporin.com](https://www.aquaporin.com)

## HQ, PRODUCTION AND R&D IN DENMARK

Aquaporin A/S is located outside Copenhagen, Denmark, with built-for-purpose labs, pilot production and a newly installed state-of-the-art large-scale membrane production line.

## KEY COMPONENT PRODUCTION IN DENMARK

The core aquaporin proteins are produced in Denmark only, but used by the entire Aquaporin group.

## LOCAL SALES OFFICE IN THE US

Aquaporin US located in California, handles both sales activities and customer support in region of the Americas.

## LOCAL SALES OFFICE IN CHINA

Aquaporin in China handles both sales activities and customer support in China.

## AQUAPORIN IN SPACE

The Aquaporin Space Alliance Joint Venture with Danish Aerospace Company ApS tests and markets Aquaporin Inside® membranes for the space industry, working with both the European and American space agencies.

## R&D & BUSINESS DEVELOPMENT HUB IN SINGAPORE

Aquaporin Asia located in Singapore's water technology hub handles both membrane development and pilot production as well as business development and sales activities for Asia outside China.

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